Applicant herein does not use a flow meter which computes the flow at the site of metering. Applicant herein claims in Claim 1:

a pair of pressure/temperature transducers to be connected proximate the upstream and downstream sensing points of a heat transfer device for supplying temperature and pressure data to said register/transmitter,

Proffitt uses the pressure data, as such, in the calculations that it discloses. Unlike Proffitt, Applicant has the following structure which uses this pressure information in a totally different way:

computational means for periodically multiplying the square root of the change in pressure times the change in temperature from the pressure and temperature data supplied from said pair of pressure/temperature transducers....

Here Applicant computes the square root of delta P - this is not a determination of flow. No reference discloses the use of pressure sensors on either side of an energy using device to compute this number.

Applicant then multiplies this square root of delta P (X) times delta T (Y) to create a product of the two (X times Y). No reference teaches the periodic creation of this number (X times Y).

Claim 1 also requires:

accumulating means for accumulating the computed square root of the change in pressure times the change in temperature.

No reference teaches the periodic accumulation of these X times Y.

Claim 1 also requires

host computer means including

receiver means for receiving the serial number and the accumulated computed square root of the change in pressure times the change in temperature and

second computational means for

identifying the specific heat transfer device and

computing the BTU's of received accumulated computed square root of the change in pressure times the change in temperature with stored catalog data for the specific heat transfer device identified.

No reference teaches the transmission of this accumulated product of X times Y and the determination of heat use by applying catalog data (BTU's/ gallon and flow/square root of delta P, for example).

The system does not have to compute flow - it computes BTU's. None of this structure is made obvious by Longini or Proffitt, alone or in combination. They determine flow at one location, at the site of a flow meter. General thermodynamic principles do not get you from the references to the invention claimed in claim 1.

Clearly claim 1 is patentable and claim 1 and dependent claims 2-4 should be presently allowed.

Respectfully submitted,

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